

WHAT IS CLAIMED IS:

1. An application program interface apparatus comprising:
 - a. means for receiving a read data request or a write data request or a request
5 to perform an operation from a client application regarding a target database;
 - b. means for managing communications connections and request queues;
 - c. first means for checking the security authorization and control associated with the data request;
 - 10 d. means for transmitting the data request if the first checking means determines that the data request is valid;
 - e. means for receiving a data response from an access component;
 - f. second means for checking the security authorization and control associated with the data response; and
 - 15 g. means for transmitting the data response to the client application if the second checking means determines that the data response is valid.
2. The apparatus of claim 1, further comprising:

monitoring means to monitor all received data requests and all data responses
20 to identify any request or response that contributes an application trigger and, in response to an application trigger, to generate and transmit an appropriate application trigger to activate an appropriate application.

8. The apparatus of claim 1 where the data request and data transmission are transmitted electronically using one means from the group comprising: the Internet, leased telephone lines, wireless communication, local area networks, wide-area networks, dial-up, a combination of telecommunication links, satellite communication, and
5 exchange of removable media.

9. The apparatus of claim 1, where the access component is selected from the group comprising: ODBC, JDBC, Java adapter, and OLE DB.

10. An application program interfacing method comprising:
- a. receiving a read data request or a write data request or a request to perform an operation from a client application;
 - b. managing communications connections and request queues;
 - c. checking security authorization and control associated with the data
15 request;
 - d. transmitting the data request if checking the security authorization and control associated with the data request determines that the data request is valid;
 - e. receiving a data response from an access component;
 - f. checking security authorization and control associated with the data
20 response; and

g. transmitting the data response to the client application if checking the security authorization and control associated with the data response determines that the data response is valid.

5 11. The application program interfacing method of claim 10, further comprising:

 monitoring all received data requests and all data responses to identify any request or response that contributes an application trigger and, in response to an application trigger, to generate and transmit an appropriate application trigger to
10 activate an appropriate application.

 12. The application program interfacing method of claim 10 where the client application is selected from the group comprising, insurance company applications, after market store applications, bank applications, motor vehicle agency applications, salvage
15 company applications, supplier company applications, car company applications, retailer applications, vehicle dealer applications, consumer applications, internet-based applications, auction house applications, automotive broker applications, collision repair applications and information broker company applications.

20 13. The application program interfacing method of claim 10, wherein the first and second checking for security authorization use identification authentication.

14. The application program interfacing method of claim 10 where the first checking for security authorization comprises an audit list of data requests for tracking transactions.

5 15. The application program interfacing method of claim 10, wherein the first and second security authorization authenticates the data for authority to access the target database and data elements in the database, and to read, write or operate thereon.

10 16. The application program interfacing method of claim 10, where the client application has file structure that is selected from the group comprising: relational database, flat file, multi-value, ASCII, sequential access files, XML, and application-specific structures.

15 17. The application program interfacing method of claim 10 where the data request and data transmission are transmitted electronically using one means from the group comprising: the Internet, leased telephone lines, wireless communication, local area networks, wide-area networks, dial-up, a combination of telecommunication links, satellite communication, and exchange of removable media.

20 18. The application program interfacing method of claim 10, where the access component is selected from the group comprising: ODBC, JDBC, Java adapter, and OLE DB.

19. A data storage medium containing instructions which, when executed on a programmable apparatus will cause the apparatus to perform an application interfacing method, the method comprising:

- a. receiving a read data request, a write data request or an operation request from a client application;
- b. managing communications connections and request queues;
- c. checking security authorization and control associated with the data request;
- d. transmitting the data request if checking the security authorization and control associated with the data request determines that the data request is valid;
- e. receiving a data response from an access component;
- f. checking security authorization and control associated with the data response; and
- g. transmitting the data response to the client application if checking the security authorization and control associated with the data response determines that the data response is valid.

20. The data storage medium of claim 19, said application interfacing method further comprising:

monitoring all received data requests and all data responses to identify any request or response that contributes an application trigger and, in response to an application trigger, to generate and transmit an appropriate application trigger to activate an appropriate application.

21. The data storage medium of claim 19 where the client application is selected from the group comprising, insurance company applications, after market store applications, bank applications, motor vehicle agency applications, salvage company applications, supplier company applications, car company applications, retailer applications, vehicle dealer applications, consumer applications, internet-based applications, auction house applications, automotive broker applications, collision repair applications and information broker company applications.

22. The data storage medium of claim 19, wherein the first and second checking for security authorization use identification authentication.

23. The data storage medium of claim 19 where the first checking for security authorization comprises an audit list of data requests for tracking transactions.

24. The data storage medium of claim 19, wherein the first and second security authorization authenticates the data for authority to access the target database and data elements in the database, and to read, write or operate thereon.

25. The data storage medium of claim 19, where the client application has file structure that is selected from the group comprising: relational database, flat file, multi-value, ASCII, sequential access files, XML, and application-specific structures.

26. The data storage medium of claim 19 where the data request and data transmission are transmitted electronically using one means from the group comprising: the Internet, leased telephone lines, wireless communication, local area networks, wide-area networks, dial-up, a combination of telecommunication links, satellite communication, and exchange of removable media.

27. The data storage medium of claim 19, where the access component is selected from the group comprising: ODBC, JDBC, Java adapter, and OLE DB.

28. A data view apparatus comprising:

- a. means for receiving a read data request, a write data request or an operation request from a system domain server, such data request originating from a client application;
- b. means for extracting data from appropriate files and fields in a target database, and mapping and performing stored procedures upon the extracted data to build a data response to the read data request, the data response being in appropriate format;
- c. means for writing data in appropriate formats in the target database, and building a data response to the write data request; and
- d. means for transmitting the data responses to the server.

29. The apparatus of claim 28 where the target database is selected from the group comprising, insurance company applications, after market store applications, bank

applications, motor vehicle agency applications, salvage company applications, supplier company applications, car company applications, retailer applications, vehicle dealer applications, consumer applications, internet-based applications, auction house applications, automotive broker applications, collision repair applications, and
5 information broker company applications.

30. The apparatus in claim 28 where the target database has a file structure that is selected from the group comprising: relational database, flat file, multi-value,
10 ASCII, sequential access files, XML, and application-specific structures.

31. A data view method comprising:

- a. receiving a read data request, a write data request, or an operation request from a system domain server, such data request originating from a client
15 application;
- b. extracting data from appropriate files and fields in a target database, and mapping and performing stored procedures upon the extracted data to build a data response to the read data request, the data response being in appropriate format;
- 20 c. writing data in appropriate formats in the target database, and building a data response to the write data request; and
- d. transmitting the data responses to the server.

32. The method of claim 31 where the target database is selected from the group comprising, insurance company applications, after market store applications, bank applications, motor vehicle agency applications, salvage company applications, supplier company applications, car company applications, retailer applications, vehicle dealer applications, consumer applications, internet-based applications, auction house applications, automotive broker applications, collision repair applications, and information broker company applications.

33. The method in claim 31 where the target database has a file structure that is selected from the group comprising: relational database, flat file, multi-value, ASCII, sequential access files, XML, and application-specific structures.

34. A data storage medium containing instructions, which when executed on a programmable apparatus, will cause the apparatus to perform a data interchange method, the method comprising:

a. receiving a read data request, a write data request, or an operation request from a system domain server, such data request originating from a client application;

b. extracting data from appropriate files and fields in a target database, and mapping and performing stored procedures upon the extracted data to build a data response to the read data request, the data response being in appropriate format;

- c. writing data in appropriate formats in the target database, and building a data response to the write data request; and
- d. transmitting the data responses to the server.

5 35. The medium of claim 34 where the target database is selected from the group comprising, insurance company applications, after market store applications, bank applications, motor vehicle agency applications, salvage company applications, supplier company applications, car company applications, retailer applications, vehicle dealer applications, consumer applications, internet-based applications, auction house
10 applications, automotive broker applications, collision repair applications, and information broker company applications.

 36. The medium in claim 34 where the target database has a file structure
15 that is selected from the group comprising: relational database, flat file, multi-value, ASCII, sequential access files, XML, and application-specific structures.

 37. A data interchange system comprising:

- a. an application program interface comprising

20 1. means for receiving a read data request, a write data request, or a request to perform an operation, from a client application regarding a target database;

2. means for, managing communications connections and request queues;

3. first means for checking the security authorization and control associated with the data request;

5 4. means for transmitting the data request if the first checking means determines that the data request is valid;

5. means for receiving a data response from an access component;

10 6. second means for checking the security authorization and control associated with the data response; and

7. means for transmitting the data response to the client application if the second checking means determines that the data response is valid;

15 b. the access component, electronically communicating with the application program interface and system domain server, with means to receive the data request and transmit it to the system domain, and means to receive the data response and transmit it to the application program interface;

20 c. the system domain, with means to receive the data request and transmit it to an interface component, and means to receive the data response and transmit it to the access component;

d. the interface component comprising:

40. The data interchange system of claim 37 where the client application has a file structure that is selected from the group comprising: relational database, flat file, multi-value, ASCII, sequential access files, XML, and application-specific structures.

5 41. The data interchange system of claim 37 where the target database is for an application selected from the group comprising, insurance company applications, after market store applications, bank applications, motor vehicle agency applications, salvage company applications, supplier company applications, car company applications, retailer applications, vehicle dealer applications, consumer applications, internet-based
10 applications, auction house applications, automotive broker applications collision repair applications and information broker company applications.

42. The data interchange system of claim 37 where the client application is selected from the group comprising, insurance company applications, after market store
15 applications, bank applications, motor vehicle agency applications, salvage company applications, supplier company applications, car company applications, retailer applications, vehicle dealer applications, consumer applications, internet-based applications, auction house applications, automotive broker applications collision repair applications and information broker company applications.

20 43. The data interchange system of claim 37, further including means for checking access authorization of the data request.

44. The apparatus of claim 37, where the first means for checking the security authorization comprises an audit list of data requests for tracking transactions.

45. The apparatus of claim 37, wherein the first and second means for checking security authorization authenticates the data request for authority to access a database and data elements in the database.

46. The apparatus of claim 37, where the access component is selected from the group comprising; ODBC, JDBC, Java adapter, and OLE DB.

47. The apparatus of claim 37, where the data base request and data transmission are transmitted using one means from the group comprising; the Internet, leased telephone lines, wireless communications, local area networks, wide-area networks, dial-up, optical fiber links, a combination of telecommunication links, satellite communication, and exchange of removable media.

48. A data interchange method comprising:

a. an application program interfacing method comprising

1. receiving a read data request, a write data request, or a request to perform an operation, from a client application;
2. managing communications connections and request queues;
3. checking security authorization and control associated with the data request;

4. transmitting the data responses to the server; and
- e. communicating between the target database and the data view apparatus.

5 49. The data interchange method in claim 48, further comprising:

monitoring all received data requests and all data responses to identify any request or response that constitutes an application trigger and, in response to an application trigger, generating and transmitting an appropriate application trigger message to activate and appropriate application.

10 50. The data interchange method of claim 48 where the target database is of a file structure that is selected from the group comprising; relational database, flat file, multi-value, ASCII, sequential access files, XML, and application-specific structures.

15 51. The data interchange method of claim 48 where the client application is selected from the group comprising, insurance company applications, after market store applications, bank applications, motor vehicle agency applications, salvage company applications, supplier company applications, car company applications, retailer applications, vehicle dealer applications, consumer applications, internet-based
20 applications, auction house applications, automotive broker applications collision repair applications, and information broker company applications.

4. transmitting the data request if checking the security authorization and control associated with the data request determines that the data request is valid;

5. receiving a data response from an access component;

5 6. checking security authorization and control associated with the data response; and

7. transmitting the data response to the client application if checking the security authorization and control associated with the data response determines that the data response is valid;

10 b. communicating among the access component, an interface component and system domain server;

c. communicating between the system domain server and a data view apparatus;

d. a data viewing method comprising:

15 1. receiving a read data request, a write data request, or an operation request from a system domain server, such data request originating from a client application;

2. extracting data from appropriate files and fields in a target database, and mapping and performing stored procedures upon the extracted data to build a data response to the read data request, the data response being in appropriate format;

20 3. writing data in appropriate formats in the target database, and building a data response to the write data request; and

52. The data interchange method of claim 48, further including checking access authorization of the data request.

53. The data interchange method of claim 48 where the first means for checking the security authorization comprises an audit list of data requests for tracking transactions.

54. The data interchange method of claim 48, wherein the first and second means for checking security authorization authenticates the data request for authority to access a database and data elements in the database.

55. The data interchange method of claim 48, where the access component is selected from the group comprising: ODBC, JDBC, Java adapter, and OLE DB.

56. The data interchange method of claim 48, where the data request and data transmission are transmitted using one means from the group comprising; the Internet, leased telephone lines, wireless communication, local area networks, wide-area networks, optic fibers, dial-up telecommunication line, satellite communication, and exchange of removable media.

57. A data storage medium containing instructions which, when executed on a programmable apparatus, will cause the apparatus to perform a data interchange method, the method comprising:

- a. an application program, interfacing method comprising:
 1. receiving a read data request, a write data request, or a request to perform an operation, from a client application;
 2. managing communications connections and request queues;
 - 5 3. checking security authorization and control associated with the data request;
 4. transmitting the data request if checking the security authorization and control associated with the data request determines that the data request is valid;
 - 10 5. receiving a data response from an access component;
 6. checking security authorization and control associated with the data response; and
 7. transmitting the data response to the client application if checking the security authorization and control associated with the data response
15 determines that the data response is valid;
- b. communicating among the access component, an interface and a system domain server;
- c. communicating between the system domain server and a data view apparatus;
- 20 d. a data viewing method comprising:
 1. receiving a read data request, a write data request, or an operation request, from a system domain server, such data request originating from a client application;

2. extracting data from appropriate files and fields in a target database, and mapping and performing stored procedures upon the extracted data to build a data response to the read data request, the data response being in appropriate format;

5 3. writing data in appropriate formats in the target database, and building a data response to the write data request; and

4. transmitting the data responses to the server; and

e. communicating between the target database and the data view apparatus.

10 58. The data storage medium in claim 57, the application program interfacing method further comprising:

monitoring all received data requests and all data responses to identify any request or response that constitutes an application trigger and, in response to an application trigger, to generate and transmit an appropriate application trigger message to activate an
15 appropriate application.

59. The data storage medium of claim 57 where the target database is of a file structure that is selected from the group comprising: relational database, flat file, multi-value, ASCII, sequential access files, XML, and application-specific structures.

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60. The data storage medium of claim 57 where the client application is selected from the group comprising, insurance company applications, after market store applications, bank applications, motor vehicle agency applications, salvage company

applications, supplier company applications, car company applications, retailer applications, vehicle dealer applications, consumer applications, internet-based applications, auction house applications, automotive broker applications, collision repair applications, and information broker company applications.

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61. The data storage medium of claim 57, further including means for checking access authorization of the data request.

62. The data storage medium of claim 57, where the first means for checking the security authorization comprises an audit list of data requests for tracking transactions.

63. The data storage medium of claim 57, wherein the first and second means for checking security authorization authenticates the data request for authority to access a database and data elements in the database.

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64. The data storage medium of claim 57, where the access component is selected from the group comprising: ODBC, JDBC, Java adapter, and OLE DB.

65. The data storage medium of claim 57, where the data request and data transmission are transmitted using one means from the group comprising: the Internet, leased telephone lines, wireless communication, local area networks, wide-area networks, optic fibers, dial-up, a combination of telecommunication links, satellite communication, and exchange of removable media.